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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,908	07/10/2003	Kim Y. Lee	HIT1P010/SJ0920020123US1	4896
50535	7590	08/14/2006	EXAMINER	
ZILKA-KOTAB, PC P.O. BOX 721120 SAN JOSE, CA 95172-1120			NGUYEN, TAI V	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,908

Applicant(s)

LEE ET AL.

Examiner

Tai Van Nguyen

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 16-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 11 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8-10 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicants' election with traverse in the reply filed on 6/27/2006 is acknowledged.

The traversal is on the ground(s) that applicants believe that the restrictions between species Group I-A and Group I-B, are improperly grouped. The examiner traverses at least for the following reasons.

Group I-A, claims 1-15, requires protective layer as mask not required in Group I-B.

Group I-B, claims 21-32, requires protective layer includes a resist under coat and a second layer of resist above the resist undercoat not required in group I-A.

These features require two different and distinct lines of patentability and would place a burden on the examiner to search and examine both group of invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 21-32 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention Group I-B, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/27/2006.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The following title is suggested: A METHOD FOR CREATING A MAGNETIC HEAD.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Gill (US 6,570,745).

As applied to claims 1 and 3, Gill discloses a method for creating a magnetic head, comprising: adding leads (96, Fig. 4) to a wafer stack (42) having a free layer (68), a bias layer (88), and a spacer layer (64) between the free layer and bias layer, wherein a gap (84) is formed between the leads; adding a protective layer (104) to the wafer stack such that the gap is covered, the protective layer also covering facing ends of the leads; removing material from at least one side area of the wafer stack using the protective layer as a mask (94); removing the protective layer; and processing a portion

of the bias layer below the gap for reducing a magnetic moment of the bias layer in the portion of the bias layer below the gap for forming a sensor in which magnetic moments of end portions of the free layer are pinned by magnetic moments of end portions of the bias layer (column 1, line 55-65+).

As applied to claim 2, Gill discloses wherein the magnetic moments of the end portions of the free layer are pinned antiparallel to the magnetic moments of the end portions of the bias layer (column 6, lines 8-40+).

As applied to claim 11, Gill discloses further comprising adding lead material to the at least one side area (96) of the wafer stack.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gill in view of Chang et al (US 6,434,814).

As applied to claim 4, Gill discloses all of the limitations of the claimed invention except that the gap is formed between the leads by reactive ion etching.

However, Chang et al teach forming the gap is formed between the leads by reactive ion etching (see column 6, line 61).

As applied to claim 7, Chang et al disclose the material in the at least one side area of the wafer stack is removed by at least one of ion milling and sputter etching (column 8, lines 57-60).

It would have been obvious to one ordinary skill in the art at this time the invention was made to have modified the method of of Gill by including reactive ion etching, as taught by Chang et al to positively provide the track width of read sensor with improved side edges (column 3, lines 24-26).

Allowable Subject Matter

9. Claims 5, 6, 8-10 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 571-272-4567. The examiner can normally be reached on M-F (7:30 A.M - 4:30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN.
August 8, 2006



A. DEXTER TUGBANG
PRIMARY EXAMINER